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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/303,587 05/03/99 VILJANMAA

M 990.119CON

EXAMINER

021831 QM12/0413  
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HLIYNH, I

ART UNIT

PAPER NUMBER

3721

DATE MAILED:

04/13/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**

Application No.

09/303,587

Applicant(s)

VILJANMAA ET AL.

Examiner

Louis K. Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 May 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 17 is rejected under 35 U.S.C. 101 because the claim is directed to neither a “machine” nor a “process”. Claim 17, which embraces or overlaps two different statutory classes of invention, namely a “machine” and “process”, thus failing to conform with 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. See MPEP § 2173.05(p)(b).

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Several phrases in the claims are confusing, vague and indefinite, for example:

“determining ... physical property” (claims 1 & 11, line 8) and “determining ... and material” (claim 2, line 3) is vague and confusing for it is not understood why known property need to be determined and how the property is determined, should the roll be scaled in order to determine the mass during operation of the calender, etc.; “the computing is carried out by the pair of rolls” (claim 14, line 1-2) is vague and indefinite for it is unclear as to what computation and/or which

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pair of rolls applicants are referring to, and how such pair of rolls can be carried out the computation since they are obviously not of any computing units; “wherein ... intermediate rolls” (claim 15, lines 1-3) is confusing for it is unclear as to whether applicants are considering each of the bending rigidity, mass, shape, and material as a single physical property or all of the listed properties as a single physical property affecting the bending of the roll.

Claim 17 is indefinite because claim 17 recites “A multi-nip calender for carrying out the method of Claim 1” which makes claim 17 ambiguous. *Ex parte Lyell*, 17 USPQ2d 1548 (BPAI 1990).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-8 and 11-17, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Schiel (5,226,357).

Schiel discloses a paper calender and a method of calendaring wherein a control computer (7) is programmed in accordance with a complex system of formulas of the multi-roll calender (1), which formulas associate the values of the weight forces, the linear loads resulting therefrom and the sag-free linear forces; the computer also determines the internal pressure of the sag-compensation roll (2) (column 3, line 31-37) by taking into account the known physical properties such as weight forces as well as the inherent stiffness of all rolls (column 2, lines 32-

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52) so that the support forces can be adjusted to have a relatively large control range of the linear forces in the calender nips (column 2, line 6-10).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 9-10, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiel (5,226,357) in view of Koivukunnas et al. (5,438,920).

The method of Schiel discloses all of applicants' claimed subject matter but lacks the specific teaching of the distribution of linear load in the set of rolls from nip to nip is about 90°, or can be adjusted in the range from about 75° to about 80°.

Koivukunnas et al. disclose a method for calendering paper web wherein the linear load in the set of rolls from nip to nip is adjustable as illustrated in Figures 1A, 1B and 1C for different quality of the treated paper web (column 4, lines 19-37).

It would have been obvious to a person with an ordinary skill in the art, at the time of the invention, to have applied the teaching of Koivukunnas et al. into the method of Schiel so that desirable linear load in the set of rolls from nip to nip can be utilized for different paper qualities.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patent No. 4,597,326 to Tapani; US patent No. 4,625,637 to Pav et al.; US patent No. 4,644,860 to Brendel; US patent No. 4,903,517 to Van Haag et al.; US patent No. 4,936,207

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to Niskanen et al.; US patent No. 5,029,521 to Pav et al.; US patent No. 5,343,801 to Schiel.; US patent No. 5,562,037 to Van Haag; US patent No. 5,791,242 to Kayser et al.; US patent No. 6,129,011 to Cramer.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis K. Huynh whose telephone number is (703) 306-5694. The examiner can normally be reached on M-F from 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3579 for regular communications and (703) 308-7769 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

LH  
April 9, 2001

A handwritten signature in black ink, appearing to be 'Peter Vo', written over a horizontal line.

**PETER VO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700**